Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC

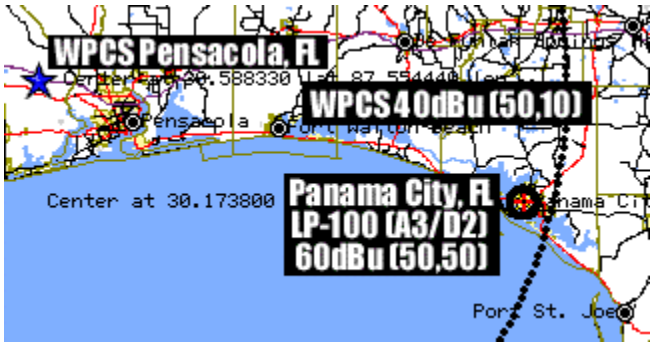
In the matter of:	)	
	)	**MM Docket 99-25**
Establishment of a Low Power	)	RM-9208
Radio Service	)	RM-9242
	)	

REPLY COMMENTS OF REC NETWORKS

1. REC Networks ("REC") hereby submits it's reply to several comments filed by other entities, corporations and individuals regarding the establishment of a Low Power Radio Service ("LPFM"). REC sustains it's support for the LPFM service as mentioned in our comments, errata and amendments dated May 10, 1999, June 27, 1999, July 16, 1999 and July 22, 1999.

2. *Co-Channel and First Adjacent Channel Interference concerns.* REC wants to reinforce the fact that LPFM is willing to play by the rules when it comes to co-channel and first adjacent channel protections. LPFM stations would have a 60dBu contour and would be restricted from overlapping another station's 40dBu interference contour (at the co-channel level). This is achieved by imposing minimum distance spacing guidelines, similar to those used in full power FM radio. Pensacola Christian College ("WPCS") claims that because Panama City, FL has a full power FM station on WPCS second adjacent channel, that an LPFM station could operate on the WPCS channel and cause harmful interference to WPCS listeners in Panama City. REC finds this statement containing absolutely no technical merit. WPCS is a Class C NCE-FM station in Pensacola, FL. Panama City, FL is approximately 159 km away. Even though Panama City is not in the WPCS 60dBu service contour, it is within their 40dBu (197 km) interference contour. This would mean that no LPFM station of

any class could be constructed on the WPCS channel. For an LP-10 station, a minimum distance of 200km from a Class C is required to avoid prohibited overlap. WPCS is 186km away from Panama City. In the following illustration, we show the WPCS 40 dBu interference contour along with the 60dBu contour of a LP-100 (A3/D2) station and how WPCS has an interference contour over the entire community of Panama City:



3. *Second and third adjacent channel protection.* We have reviewed the reports submitted by the National Association of Broadcasters ("NAB")/Consumer Electronics Manufacturers Association ("CEMA") and the Microradio Empowerment Coalition ("MEC") but we were most moved by the report issued by the Commission's Office of Engineering and Technology ("OET"). The OET report supported almost everything that the MEC report stated, that most radios studied can handle second adjacent channels and all radios in the study were able to handle third adjacent channels. We were amused by the NAB/CEMA report, which stated that FM receiver technology has not developed in the last couple of decades. As I look at my drive to work every day in my 1997 Kia, I tune across the dial and hear distant stations on second and even first adjacent channels coming in clear as day with no interference from other channels. I turn on my Bose Wave Radio and listen to those nice quiet spots on 99.1 and 105.1 here in Tempe, no sign of the stations on 98.7 and 104.7 anywhere! The Seventh Day Adventist Church

expressed concern about second adjacent channel interference in their comments. Even though they predicted interference for second adjacent LP-1000, the numbers for LP-100 stations were much lower. For their Spokane station, there would be no population affected by their so-called interference. REC still thinks that LP-1000 stations SHOULD be subject to second adjacent channel interference, due to the high probability of blanketing interference. The impact for blanketing interference at the lower power levels is very well reduced. For example, if I was to put an LP-10 (D2) station at my house, my 125-dBu blanketing interference contour could cover a population of about 30 people. We feel that LP-100 (A3/D1) and LP-10 (D2) stations not be subject to second adjacent channel protection requirements.

4. *Eliminating the second and third adjacent channel protection requirements for translators.* PCC offered in their list of alternatives for displaced translators that translators could apply for a waiver to eliminate second or third adjacent channel restrictions. REC feels that translators should be allowed, by rule, to drop third adjacent channel protection requirements <u>if</u> the translator station is inferior to an LP-1000 station (60-dBu-service contour of 14.2 km or less). Translators with facilities inferior to an LP-100 station (60-dBu service contour of 5.2 km or less) should be entitled to drop second adjacent channel restrictions.

5. *Displacement of translators.* Several commenters, especially the distant translator operators like WPCS and Calvary Chapel of Twin Falls ("CCTF") expressed concern that LPFM would displace their operations. REC proposes to protect all LOCAL translators. These are sites that have their primary station located within 400 km of the translator. Some have stated that "all satellite fed" translators should be subject to displacement. We disagree. We feel

that translators, including commercial stations should be allowed to use other means than direct RF input to retransmit their programming as long as the 400-km limit as well as other Part 74 regulations are met. The only exception to the 400-km rule we are asking for is in the State of Alaska where all intra-state translators would be protected. REC does feel that LPFM applicants should do every possible thing to avoid the displacement of a distant translator. Under REC's proposal, LPFM applicants can not displace a distant translator unless no other channel can be found to place an LPFM station on. Keep in mind that our SuperCoordinator program was able to find LPFM channels to serve over 65% of the US population without having to displace any distant translators. "Bumping" of distant translators would only be a last resort in a crowded metro area. For example here in Phoenix, displacing one mountaintop distant translator would make at least 6 additional LP-100 (A3) stations available in the area. But let's wait until the clear channels in the area are filled before we go there. LOCAL Translators contribute to the regional economy; they provide news and information closer to home than the distant translator as well as providing even more choice to rural radio listeners. We must protect the investment of the local translators. All existing local translators should be protected from LPFM stations.

6. *The question of whether LPFM would really be able to provide a local service.* CCTF makes the impression that distant translators would serve the local needs of a community as much if not more than a LPFM station. Will a station in Twin Falls talk about a school closure in Holbrook, AZ? What about the school lunch menu in Pahrump, NV? Perhaps the major accident and road closure in Roy, UT? What about the hazardous material spill and evacuation in YOUR community? LPFM stations would be operated by high schools to

provide our future with a new creative means of expression and possibly a way of keeping them off the streets. LPFM stations would be operated by neighborhood associations, individuals with concern for their community as well as LOCAL churches sending out their own LOCAL message and in some cases, in their own LOCAL language.

7. *Efficient use of spectrum.* The NAB claims that LPFM as well as the old Class-D radio service are not efficient use of spectrum. In our opinion, more voices are a more efficient use of spectrum. When you can put over 7,500 10 watt LPFM stations on one channel (87.5) and without any prohibited overlap and still protecting hundreds of TV stations, that is efficient use of spectrum.

8. *Impact of small market broadcasters.* In the proceeding, we saw a lot of comments from the small market stations concerned that the addition of LPFM stations would remove market share and could lead their stations into financial ruins. The first thing we ask some of these stations is why are they not fighting new allotments? Just this year alone, there have been over 200 dockets for new FM allotments. This is the real competition that small market stations should fear. I can not see how a 10-watt high school station is going to take away market share from a Class-A commercial station. Even the higher-powered community *non-commercial* LPFM stations operating between 100 and 1000 watts would not be a significant threat to a station's market share. LPFM will have it's following, but maybe it's because not everyone wants to listen to satellite delivered country music.

9. *Full Power before Low Power.* KHWY states that no LPFM station should go into a community until a full power station is constructed in the community. We would like to remind KHWY that some communities, like Congress, AZ, are small communities with populations under 1,000 and are dependent on a neighboring city. These communities may not be big enough for a full power allotment but are the perfect size for a 100 or 250 watt LPFM station. Also look at a community right on KHWY's back door; Boron, CA is the home of the Borax Global open pit mine and has a population of over 2,000. They have a fire department, post office, church, historical museum, shopping, restaurants and service stations. Sounds like the perfect city for an allotment, right? The nearest cities are Mojave (40 miles to the west) or Barstow (40 miles to the east) and Lancaster (30 air miles, 60+ driving miles to the south). So as you can tell, there is not too much near this community, situated on the "back" of Edwards Air Force Base. This community can not get a full power Class-A station due distance spacing restrictions. This community could never get a full power FM station. This community could get a 250-watt (A2) LPFM station. Under KHWY's plan, Boron would never get a local radio station, not even an LP-10 (D2), even though the nearest town is 40 miles away. LPFM must be available everywhere, regardless of whether the community already has a full power station.

10. *LPFM is <u>not</u> a replacement for public radio.* The State of Oregon claims that "LPFM will replace the existing public radio system". Trust me, even with LPFM stations sprouting up all over America, the big NPR 100kW Class C FM stations and their network of local translators will still continue to bring us excellent programming such as "Morning Edition" and "All Things Considered". This is because REC's plan <u>protects</u> the existing public radio

system by providing protection to local translators (regardless of how they are fed) as well as full co-channel and first adjacent channel protections to full powered stations. For the higher-powered stations over 100 watts, REC is maintaining the second adjacent and IF channel restrictions. If anything, we see LPFM as an enhancement to the existing public radio system. Let's face it, not everyone likes jazz and classical music, but there are many that do. There are other diverse formats which have been phased-out by many public radio stations in order to provide the format that the financial supporters of the station want. Government funded public radio (and television) has become, "radio for the rich". The LPFM stations would be able to fill that void by providing programs which used to be a mainstay on public radio stations, back when students ran the stations.

11. *The 10-watt microradio service.* We have heard from various groups including the author of RM-9242, Rodger Skinner who is proposing dropping the 10 watt microradio service completely from consideration. REC continues to support the microradio service and a part of the REC plan to get as many high schools across the country on the air. In the REC SuperCoordinator comments, we have placed over 10,000 ten-watt microstations in high schools with over 7,500 of them on 87.5 MHz. There are many fears that 10 watt microstations will create a "CB Radio like" environment on the FM dial. Anything can be further from the truth. The microradio service would allow more voices on the air and bring these diverse voices into the communities where they are needed most. In some areas, like Los Angeles, the only radio services available in most areas will be the 10-watt microstations. Personally, REC would rather see the 1kW (A1) service go away before the 10-watt microradio service does.

12. *Additional channels and the consumer hardship issue.* Some have suggested at this time that we assign no additional spectrum to LPFM because a new radio would have to be purchased and that would create a consumer hardship. As mentioned in all of REC's comments, three channels can be introduced to over 7,000 communities across America and almost every radio can pick it up. Channels 198, 199 and 200 (87.5 through 87.9) are available on most FM radio receivers and can be used now in communities where Channel 6 interference is not an issue.

13. *Digital FM Radio. Where's the outcry?* Because of the digital technology being offered by digital videotape formats, laser discs, DVD discs as well as digitally delivered programming from cable and satellite providers, there is a demand for digital TV. There was enough spectrum to double the number of full power TV stations in the US, DTV was born. Here comes digital radio, let's see, I guess it started with the CD. Well the CD got popular, but what about the other digital formats. Except in the professional broadcast world, DAT never got popular. Does anyone even remember Digital Compact Cassettes? Now it seems the big craze is MP3, but they require a computer and take forever to download. When was the last time you heard someone say, "geez, this FM radio sounds horrible"? Unlike digital TV, there is not a big public outcry for digital RADIO. REC feels that IBOC is still just an experiment and if brought in-band, will go the same way that "quad" and the Kahn-Hazeltine AM stereo system went. Notice that not too many manufacturers have an AM stereo radio receiver anymore? IBOC is going to be the "quad" of the 21st Century. LPFM is a proven

technology and should be considered before IBOC. Whichever digital standard is adopted, this technology must also be made available to LPFM stations.

14. *In conclusion.* The comments made by the broadcast industry about LPFM are without any technical, economic, social or ethical merit. There is a demand for a new type of broadcasting service. Just by the number of comments alone in this proceeding and the previous three proceedings, by the thousands of calls the Commission receives every year and by the people who dare arrest and financial penalties by circumventing the law and placing their own station on the air. The technical studies have proven that it will work. We have heard from city councils representing hundreds of thousands of the people who LISTEN to radio who are fed up with the canned over-commercialized output of CBS, Disney, Clear Channel, Gannett, Greater Media, Chancellor and the other providers of cookie cutter commercial radio. It's time to hear some new voices on the air, like BeatRadio, San Francisco Liberation Radio, Radio Santa Cruz, Free Radio Berkeley, micro KIND radio, Steal This Radio, WKJCE as well as thousands of high schools, which can now be given the green light to start broadcasting programs with REAL radio facilities. REC Networks proudly joins other LPFM proponents like the Amherst Alliance, The Committee on Democratic Communications-National Lawyer's Guild, Microradio Empowerment Coalition and national organizations such as the Communications Workers of America (who through the CWA and their sister organization NABET represent thousands of broadcast employees throughout this country) and the American Library Association in urging the Commission to amend the FCC Rules to establish a Low Power FM Radio Service.

Respectfully Submitted

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